PATENT NO. : 7,084,260 B1 APPLICATION NO. : 08/728463

08/728463

DATED INVENTOR(S)

: August 1, 2006 : Nils Lonberg et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Page 1 of 9

First Page Col. 1 Item (57) (Other Publications); Line 1; Delete "et al" and insert -- et al., --, therefor.

First Page Col. 1 (Other Publications); Line 1; Delete "Immunology" and insert -- Immunobiology --, therefor.

First Page Col. 1 (Other Publications); Line 5; Delete "et. al.," and insert -- et al., --, therefor.

First Page Col. 1 (Other Publications); Line 8; Delete "et. al.," and insert -- et al., --, therefor.

First Page Col. 2 (Other Publications); Line 30; Delete "(19000." and insert -- (1990). --, therefor.

Page 2 Col. 1 (Other Publications); Line 4; Delete "an" and insert -- and --, therefor.

Page 2 Col. 1 (Other Publications); Line 19; Delete "89329-8935" and insert -- 8932-8935 --, therefor.

Page 2 Col. 1 (Other Publications); Line 21; Delete "introducted" and insert -- introduced --, therefor.

Page 2 Col. 1 (Other Publications); Line 29; Delete "K" and insert -- K --, therefor.

Page 2 Col. 1 (Other Publications); Line 39; Delete "et.al.," and insert -- et al., --, therefor.

Page 2 Col. 2 (Other Publications); Line 2; Delete "genesJ." and insert -- genes J. --, therefor.

Page 2 Col. 2 (Other Publications); Line 34; Delete "v" and insert -- k --, therefor.

Page 2 Col. 2 (Other Publications); Line 38; Delete "chin" and insert -- chain --, therefor.

Page 2 Col. 2 (Other Publications); Line 49; Delete "et. al.," and insert -- et al., --, therefor.

Page 2 Col. 2 (Other Publications); Line 54; Delete "tandes" and insert -- tandem --, therefor.

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Page 2 of 9

Page 2 Col. 2 (Other Publications); Line 59; Delete "et. al.," and insert -- et al., --, therefor.

Page 3 Col. 1 (Other Publications); Line 3; Delete "Acad" and insert -- Acad. --, therefor.

Page 3 Col. 1 (Other Publications); Line 13; Delete "135::620-626" and insert -- 135:620-626 --, therefor.

Page 3 Col. 1 (Other Publications); Line 18; Delete "immnology" and insert -- immunology --, therefor.

Page 3 Col. 1 (Other Publications); Line 39; Delete "unrearrange" and insert -- unrearranged --, therefor.

Page 3 Col. 1 (Other Publications); Line 47; Delete "nature" and insert -- Nature --, therefor.

Page 3 Col. 1 (Other Publications); Line 60; Delete "86:5567-5572" and insert -- 86:5567-5571 --, therefor.

Page 3 Col. 2 (Other Publications); Line 4; Delete "immunologlobulin" and insert -- immunoglobulin --, therefor.

Page 3 Col. 2 (Other Publications); Line 5; Delete "developement" and insert -- development --, therefor.

Page 3 Col. 2 (Other Publications); Line 12; Delete "nature" and insert -- Nature --, therefor.

Page 3 Col. 2 (Other Publications); Line 13; Delete "Morrision," and insert -- Morrison, --, therefor.

Page 3 Col. 2 (Other Publications); Line 15; Delete "Petterson" and insert -- Pettersson --, therefor.

Page 3 Col. 2 (Other Publications); Line 33; Delete "Vlassov" and insert -- Vlasov --, therefor.

Page 3 Col. 2 (Other Publications); Line 43; Delete "Chan" and insert -- Chen --, therefor.

PATENT NO.

: 7,084,260 B1

Page 3 of 9

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Page 3 Col. 2 (Other Publications); Line 47; Delete "Ami-CD4" and insert -- Anti-CD4 --, therefor.

Page 3 Col. 2 (Other Publications); Line 57; Delete " V_K " and insert -- V_H --, therefor.

Page 3 Col. 2 (Other Publications); Line 58; Delete " V_{μ} " and insert -- V_{H} --, therefor.

Page 3 Col. 2 (Other Publications); Line 59; Delete "loops." and insert -- Loops. --. therefor.

Sheet 22 of 99 (FIG.21A); Line 1; Delete "HEAVY" and insert -- HEAVY --. therefor.

Column 2; Line 60; Delete "e.g." and insert -- e.g., --, therefor.

Column 5; Line 57; Delete "e.g." and insert -- e.g., --, therefor.

Column 6; Line 40; Delete "engognous" and insert -- endogenous --, therefor.

Column 6; Line 65; Delete "transgehne," and insert -- transgene, --, therefor.

Column 7; Line 67; Delete "gene," and insert -- gene. --, therefor.

Column 8; Line 1; Delete "locus," and insert -- locus. --, therefor.

Column 8; Line 2; Delete "locus," and insert -- locus. --, therefor.

Column 8; Line 3; Delete "locus," and insert -- locus. --, therefor.

Column 10; Line 58; Delete "calorimetric" and insert -- colorimetric --, therefor.

Colum 13; Line 13; After "4437;" insert --) --.

Column 13; Line 15; Delete "4437." and insert -- 4437). --, therefor.

Column 14; Line 60-61 (Approx.); Delete "Table 17. Rate.....human CD4" and insert the same on line 62 as a new paragraph.

Column 15; Line 39; Delete "chainsspecifically" and insert -- chains specifically --, therefor.

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Page 4 of 9

Column 16; Line 56; Delete "immunogloblins" and insert -- immunoglobulins --, therefor.

Column 20; Line 37; Delete "e.g." and insert -- e.g., --, therefor.

Column 21; Line 20; After "subclasses" insert -- . --.

Column 21; Line 21; Delete " Σ " and insert -- ε --, therefor.

Column 25; Line 31; Delete "Non-human" and insert -- Non-Human --, therefor.

Column 25; Line 52; Delete "e.g." and insert -- e.g., --, therefor.

Column 26; Line 53; Delete "e.g." and insert -- e.g., --, therefor.

Column 26; Line 58; Delete "e.g." and insert -- e.g., --, therefor.

Column 27; Line 51; Delete "e.g." and insert -- e.g., --, therefor.

Column 35; Line 8; Delete " μ ," and insert -- p, --, therefor.

Column 35; Line 57; Delete "cH" and insert -- C_H --, therefor.

Column 38; Line 24; Delete "CL" and insert -- C_L --, therefor.

Column 40; Line 43-52; Delete "such depletion can be.....antibody, and the like." and insert the same on line 42 as a continuation of paragraph.

Column 40; Line 62-64; Delete "thus, a suppression.....in transgenic mice." and insert the same on line 61 as a continuation of paragraph.

Column 42; Line 13 (Approx.); Delete "Trans-switching" and insert -- Trans-Switching --, therefor.

Column 42; Line 35; Delete "adavantages" and insert -- advantages --, therefor.

Column 44; Line 53; Delete "u" and insert -- μ) --, therefor.

Column 45; Line 53; Delete "e.g." and insert -- e.g., --, therefor.

Column 46; Line 44; Delete "antibodys" and insert -- antibodies --, therefor.

PATENT NO.

: 7,084,260 B1

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Page 5 of 9

Column 47; Line 8; Delete "monocloanl" and insert -- monoclonal --, therefor.

Column 47; Line 14; Delete "(e.g." and insert -- (e.g., --, therefor.

Column 49; Line 3; Delete "e.g." and insert -- e.g., --, therefor.

Column 49; Line 40; Delete "CDRS," and insert -- CDRs, --, therefor.

Column 49; Line 55; Delete " $5 \times 10^{10} \text{M}^{-1} \text{M}^{-1}$ " and insert -- $5 \times 10^{10} \text{M}^{-1}$ --, therefor

Column 50; Line 4; Delete "sequene" and insert -- sequence --, therefor.

Column 50; Line 11; Delete "sequene" and insert -- sequence --, therefor.

Column 50; Line 38; Delete "sequene" and insert -- sequence --, therefor.

Column 50; Line 45; Delete "sequene" and insert -- sequence --, therefor.

Column 50; Line 65; Delete "sequene" and insert -- sequence --, therefor.

Column 51; Line 5; Delete "sequene" and insert -- sequence --, therefor.

Column 51; Line 18; Delete "transmemebrane" and insert -- transmembrane --, therefor.

Column 52; Line 22; After "transgene" insert -- . --.

Column 52; Line 46; Delete "(i.e," and insert -- (i.e., --, therefor.

Column 54; Line 33; Delete "e.g." and insert -- e.g., --, therefor.

Column 55; Line 21; Delete "full-lenght" and insert -- full-length --, therefor.

Column 55; Line 31; Delete "practicioner," and insert -- practitioner, --, therefor.

Column 58; Line 61; Delete "the; agarose" and insert -- the agarose --, therefor.

Column 59; Line 58; Delete "Mini-locus" and insert -- Mini-Locus --, therefor.

Column 62; Line 59; Delete "fragment." and insert -- fragment --, therefor.

PATENT NO.

: 7,084,260 B1

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: August 1, 2006

INVENTOR(S)

: Nils Lonberg et al.

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Page 6 of 9

Column 71; Line 25; Delete "(FIG. 2c)." and insert -- (FIG. 20C). --, therefor.

Column 71; Line 54; Delete "p." and insert -- pp. --, therefor.

Column 72; Line 54; Delete "p." and insert -- pp. --, therefor.

Column 74; Line 8; Delete "poli," and insert -- poll, --, therefor.

Column 74; Line 28; Delete "PGMT-TK" and insert -- pGMT-TK --, therefor.

Column 75; Line 49; Delete "p." and insert -- pp. --, therefor.

Column 76; Line 67; After "below" delete "pGPla".

Column 79; Line 49; Delete "deleteon" and insert -- deletion --, therefor.

Column 80; Line 52; Delete "ou" and insert -- $\sigma\mu$ --, therefor.

Column 101; Line 57; Delete "immmunoglbulins" and insert -- immunoglobulins --, therefor.

Column 102; Line 46; Delete "pNNO3." and insert -- pNN03. --, therefor.

Column 105; Line 4; Delete "(Cyrstal" and insert -- (Crystal --, therefor.

Column 107; Line 27; Delete "e.g." and insert -- e.g., --, therefor.

Column 108; Line 8; Delete "1-50," and insert -- 10-50, --, therefor.

Column 108; Line 37; Delete "West" and insert -- Westr --, therefor.

Column 109; Line 32; Delete "Of" and insert -- of --, therefor.

Column 109; Line 63; After "mouse μ " insert -- and --.

Column 110; Line 23; Delete "IgX" and insert -- Ig\u03e1 --, therefor.

Column 110; Line 65; Delete "intergration" and insert -- integration --, therefor.

Column 111; Line 2; Delete "intergration" and insert -- integration --, therefor.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 111; Line 25-26; Delete "immmunoglobulin" and insert -- immunoglobulin --, therefor.

Page 7 of 9

Column 111; Line 37; Delete "immmunoglobulin" and insert -- immunoglobulin --, therefor.

Column 113; Line 56; Delete "(i.e," and insert -- (i.e., --, therefor.

Column 113; Line 59; Delete "(i.e," and insert -- (i.e., --, therefor.

Column 115; Line 57; Delete "reconstitutued" and insert -- reconstituted --, therefor.

Column 117; Line 8; Delete "phosphotransferse" and insert -- phosphotransferase --, therefor.

Column 120; Line 53; Delete "J_H3," and insert -- JH3, --, therefor.

Column 120; Line 54; Delete "Eu, Su," and insert -- $E\mu$, $S\mu$, --, therefor.

Column 123; Line 29; Delete "IgX" and insert -- Ig λ --, therefor.

Column 124; Line 45; Delete "Trans-switching" and insert -- Trans-Switching --, therefor.

Column 126; Line 42; Delete "sequence" and insert -- sequence --, therefor.

Column 128; Line 7; Delete "31" and insert -- 3' --, therefor.

Column 128; Line 10; Delete "31" and insert -- 3' --, therefor.

Column 128; Line 12; Delete "31" and insert -- 3' --, therefor.

Column 129; Line 2; Delete "Igu" and insert -- $Ig\mu$ --, therefor.

Column 129; Line 3; Delete "Igu" and insert -- $Ig\mu$ --, therefor.

Column 130; Line 62; Delete "IgEK" and insert -- IgE_K --, therefor.

Column 130; Line 64; Delete "IgEK" and insert-- IgE_K --, therefor.

PATENT NO.

: 7,084,260 B1

Page 8 of 9

APPLICATION NO.: 08/728463

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: August 1, 2006

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 130; Line 67; Delete "λCoated Plates" and insert -- λ Coated Plates. --, therefor.

Column 131; Line 9; After "IgG" insert -- . --.

Column 131; Line 54; Delete "Anti-human" and insert -- Anti-Human --, therefor.

Column 132; Line 60; Delete "u" and insert -- μ --, therefor.

Column 132; Line 64; Delete "u" and insert -- μ --, therefor.

Column 133; Line 51; Delete "inununoglobuhn" and insert -- immunoglobulin --, therefor.

Column 134; Line 58; Delete "V_H" and insert -- VH --, therefor.

Column 135; Line 3; Delete "K" and insert -- $_K$ --, therefor.

Column 140; Line 34; Delete "15 ng" and insert -- 15 ng/ml, --, therefor.

Column 144; Line 28; Delete "B202bright" and insert -- B220bright --, therefor.

Column 145; Line 27-46; Delete "Wells.....(ABT). For the.... (Jackson). Murine......followed." and insert the same on line 26 as a continuation of paragraph.

Column 146; Line 30; Delete "Eor" and insert -- For --, therefor.

Column 146; Line 57; Delete "absorbtivity" and insert -- absorptivity --, therefor.

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: 7,084,260 B1

Page 9 of 9

APPLICATION NO. : 08/728463

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: August 1, 2006

INVENTOR(S)

: Nils Lonberg et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 148; Line 2; Delete "calorimetric" and insert -- colorimetric --, therefor.

Signed and Sealed this

First Day of May, 2007

JON W. DUDAS Director of the United States Patent and Trademark Office